



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,808	02/07/2002	Charles K. Howard	VHSE-P01-002	3676

28120 7590 08/01/2003

ROPES & GRAY LLP  
ONE INTERNATIONAL PLACE  
BOSTON, MA 02110-2624

EXAMINER
----------

TWEEL JR, JOHN ALEXANDER

ART UNIT	PAPER NUMBER
----------	--------------

2636

DATE MAILED: 08/01/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/072,808

Applicant(s)

HOWARD, CHARLES K.

Examiner

John A. Tweel, Jr.

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 February 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities:
  - Page 3, Line 18: The word --or-- has been misspelled as "ore"
  - Page 8, Line 16: The word --tow-- has been misspelled as "two".
  - Page 10, Line 9: A word such as --to-- is needed before the second occurrence of "step".
  - Page 12, Line 10: There is an extra "is" in this line.
  - Page 12, Line 16: A word such as --is-- is needed before the second occurrence of "restricted".
  - Page 14, Line 23: An extra letter "l" is inserted after "indicate,".
  - Page 15, Line 26: The correct verb to use here is --include-- rather than "includes".
  - Page 17, Line 2: The correct verb to use in this line is --relay--.
  - Page 17, Line 20: The correct verb to use in this line is --process--.
  - Page 17, Line 21: The incorrect word "reason" should be replaced with --reasons--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

Art Unit: 2636

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 7-14, 16, and 18-22 are rejected under 35 U.S.C. 102(e) as being anticipated by **Jacobs et al** [U.S. 6,195,015].

For claim 1, the system taught by **Jacobs** includes the following claimed subject matter, as noted, 1) the claimed sensor for detecting the presence of a vehicle in a parking space is met by the auto detector (No. 266) having a sonar transducer (No. 74) to detect the presence of a vehicle, 2) the claimed parking meter associated with the parking space is met by the meter (No. 220) configured to receive a payment and including a timer that allots time according to the payment, and 3) the claimed host is met by the RF transceiver system in the specification (Col. 11, Ln. 30-Col. 12, Ln. 63) connected in a wireless communicating relationship with the sensor and in a communicating relationship with the parking meter, the transceiver configured to monitor the sensor and parking meter and to determine when the parking space contains an unauthorized vehicle and to notify an enforcement official of the location of the unauthorized vehicle.

For claim 2, the claimed base station is met by headquarters (Col. 12, Lns. 14-19) for maintaining communications between the sensor and the transceiver system.

For claims 3 and 4, both expired payment and no payment are conditions for which a vehicle is unauthorized.

For claim 7, the RF transceiver system of **Jacobs** is used by enforcement officials for receiving a wireless message of the violation.

For claim 8, the **Jacobs** reference mentions notification of enforcement officials to call for tow trucks (Col. 14, Ln. 58-59).

For claim 9, the system of **Jacobs** is designed to be used with a plurality of parking spaces in a city block, the RF transceiver system is used in conjunction with the electronics stored within the parking meter.

For claim 10, the sensor of **Jacobs** is contained within the parking meter.

For claim 11, the transceiver system of **Jacobs** communicates using a radio frequency (RF) interface.

For claim 12, the system of **Jacobs** uses a card reader (No. 276) for electronic payments.

For claim 13, the system of **Jacobs** is used for a plurality of parking meters situated on a public block.

For claim 14, the system of **Jacobs** includes the following claimed subject matter, as noted, 1) the claimed sensor for detecting the presence of a vehicle is met by the auto detector (No. 266) having a sonar transducer (No. 74) to detect the presence of a vehicle, and 2) the claimed host is met by the RF transceiver system in the specification (Col. 11, Ln. 30-Col. 12, Ln. 63) connected in a wireless communicating relationship with the sensor and in a communicating relationship with the parking meter,

the transceiver configured to monitor the sensor and to determine when the parking space contains an unauthorized vehicle and to notify an enforcement official of the location of the unauthorized vehicle.

For claim 16, the method taught by **Jacobs** includes the following claimed steps, as noted, 1) the claimed receiving a first signal from a parking space is achieved using the auto detector (No. 266) having a sonar transducer (No. 74) to detect the presence of a vehicle, 2) the claimed receiving a second signal is achieved using the meter (No. 220) configured to receive a payment and including a timer that allots time according to the payment, and 3) the claimed determining when a parking when a parking violation has occurred is achieved using the timer in said parking meter that determines whether the time for the current payment has expired, and 4) the claimed generating a message to an enforcement official is met by the RF transceiver system in the specification (Col. 11, Ln. 30-Col. 12, Ln. 63) connected in a wireless communicating relationship with the sensor and in a communicating relationship with the parking meter, the transceiver configured to monitor the sensor and parking meter and to determine when the parking space contains an unauthorized vehicle and to notify an enforcement official of the location of the unauthorized vehicle.

For claim 18, the transceiver system used by the enforcement officials of **Jacobs** is a radio frequency (RF) device.

For claim 19, the **Jacobs** reference mentions notification of enforcement officials to call for tow trucks (Col. 14, Ln. 58-59).

For claim 20, the system of **Jacobs** is used for a plurality of parking meters situated on a public block.

For claim 21, the system of **Jacobs** uses a card reader (No. 276) for electronic payments.

For claim 22, the computer program product taught by **Jacobs** includes the following claimed subject matter, as noted, 1) the claimed code for receiving a first signal is used in conjunction with the auto detector (No. 266) having a sonar transducer (No. 74) to detect the presence of a vehicle, 2) the claimed code for receiving a second signal is achieved in conjunction with the meter (No. 220) configured to receive a payment and including a timer that allots time according to the payment, and 3) the claimed code for determining when a parking when a parking violation has occurred is used in conjunction with the timer in said parking meter that determines whether the time for the current payment has expired, and 4) the claimed code for generating a message to an enforcement official is used in conjunction with the RF transceiver system in the specification (Col. 11, Ln. 30-Col. 12, Ln. 63) connected in a wireless communicating relationship with the sensor and in a communicating relationship with the parking meter, the transceiver configured to monitor the sensor and parking meter and to determine when the parking space contains an unauthorized vehicle and to notify an enforcement official of the location of the unauthorized vehicle.

Art Unit: 2636

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 6, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Jacobs et al** in view of **Fujiwara et al** [U.S. 5,266,947].

For claim 5, the system of **Jacobs** includes the claimed subject matter as discussed in the rejection of claim 1 above. However, there is no mention of notifying a payer that a payment for a parking space is about to expire.

The parking data transfer system taught by **Fujiwara** has first and second communications devices. One is fixed in its location whether it is inside of a vehicle or at a parking meter. The other is portable and designed to be carried with the driver to be apprised of the time remaining on their parking meter using a wireless communications method. This alleviates driver apprehension in having to guess when their time in the parking space has expired.

Both references are very similar in that both use wireless communications systems for alerting parking conditions to personnel. The wireless communication systems already in use in **Jacobs** are useful for transferring information to the appropriate users. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include notification of the driver of remaining time for the purpose of using technology already present in the primary reference to reduce the apprehension and confusion of the driver.



For claim 6, the system of **Fujiwara** uses an electronic paging system.

For claim 15, the system taught by **Jacobs** includes the following claimed subject matter, as noted, 1) the claimed sensor for detecting the presence of a vehicle in a parking space is met by the auto detector (No. 266) having a sonar transducer (No. 74) to detect the presence of a vehicle, 2) the claimed parking meter associated with the parking space is met by the meter (No. 220) configured to receive a payment and including a timer that allots time according to the payment, and 3) the claimed host is met by the RF transceiver system in the specification (Col. 11, Ln. 30-Col. 12, Ln. 63) connected in a wireless communicating relationship with the sensor and in a communicating relationship with the parking meter, the transceiver configured to monitor the sensor and parking meter. However, there is no mention of notifying a payer when a payment for the vehicle in the parking space is about to expire.

The claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claim 5 above.

For claim 17, the method of **Jacobs** includes the claimed subject matter as discussed in the rejection of claim 16 above. However, there is no mention of notifying a payer that a payment for a parking space is about to expire.

The claim is interpreted and rejected for the same reasons and rationale as is mentioned in the rejection of claim 5 above.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Katz** [U.S. 6,344,806] teaches a combination parking meter and vehicle sensor.

**Anthonyson** [U.S. RE37,822] communicates with vehicles approaching and leaving a parking garage.

**Jones** [U.S. 6,459,386] records parking violations using vehicle-mounted cameras.

**Racunas, Jr.** [U.S. 6,501,391] transmits parking lot information over the Internet.


**Katz** [U.S. 6,559,776] teaches a combination parking meter and vehicle sensor.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Tweel, Jr. whose telephone number is 703 308 7826. The examiner can normally be reached on M-F 10-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Hofsass can be reached on 703 305 4717. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9314 for regular communications and 703 872 9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 3900.

JAT  
July 27, 2003

  
JOHN TWEEL  
PRIMARY EXAMINER